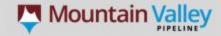




Roanoke County Pipeline Advisory Committee

Project Update & Survey Overview April 20, 2015



Project Update

- Survey and environmental study activity continuing in the field
 - Civil Surveys
 - Stream & Wetland
 - Protected Species
 - Archaeological & Architectural
 - Geological & Karst
- FERC Notice of Intent (NOI) issued on April 17, 2015
 - Public comment period: April 17 June 16
 - Scoping Meetings:
 - May 5, 2015 Eastern Montgomery High School, Elliston, VA
 - May 7, 2015 Chatham High School, Chatham, VA



Survey Overview

- Why are the surveys necessary?
- What are we looking for?
- What is the goal?
- How do the surveys impact the route?



Survey Contractors

Contractor	Survey Activity	Field Office(s)
Coates Field Services	Lead land acquisition contractor	Beckley, WV
Tetra Tech	Lead environmental survey contractor	Boston, MA; Pittsburgh, PA; and multiples offices in VA & WV
Holland Engineering	Lead civil survey contractor	Holland, MI
ERG	Stream and wetland survey subcontractor	Virginia Beach & Springfield, VA
Environmental Services and Innovations (ESI)	Rare, threatened and endangered species survey subcontractor	Cincinnati, OH
New South Associates	Cultural resource survey subcontractor	Greensboro, NC
Draper Aden Associates	Geological survey and karst analysis subcontractor	Blacksburg, VA

Supplier Information: http://mountainvalleypipeline.info/supplier-info/



Civil Surveys

- Capture physical features within 300' study corridor
 - Fence lines
 - Structures (homes, buildings, sheds, wells, manholes, utilities, etc.)
 - Streams
 - Property boundaries
 - U.S. Geological Survey (USGS) monuments
- Staking and flagging
- GPS is preferred data collection method





Stream & Wetland Surveys

Wetlands

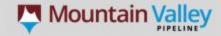
- Vegetation
- Hydrology
- Soil analysis

Streams

- Stream delineation width, depth, ordinary high water mark
- Species analysis
- Substrate analysis
- Flagging and GPS data collection
- Close consultation with state and federal agencies, and NGOs



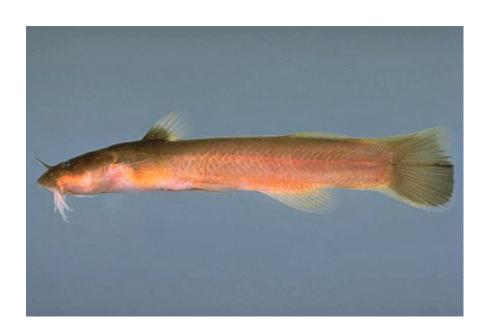


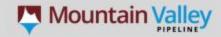


Wildlife & Plant Species Surveys

- Rare, threatened or endangered species
- Wildlife Species
 - Bats
 - Mussles (James spinymussel)
 - Fish (Roanoke Logperch & Orangefin Madtom)
 - Snakes, turtles, salamanders, and even insects
- Plant Species
- Close consultation with state and federal agencies, and NGOs
 - Nature Conservancy, Trout Unlimited, Virginia Outdoor Foundation, Wildlife Habitat Council



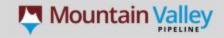




Archeological & Architectural Surveys

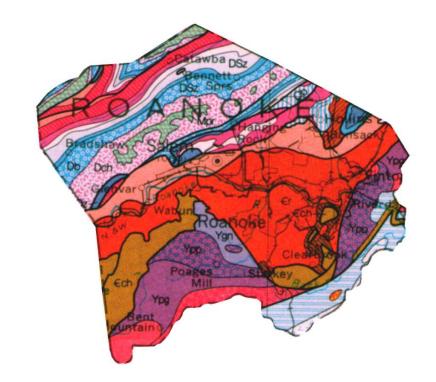
- Artifacts and architectural structures that characterize history of the landscape
 - Pottery and arrowheads
 - Historic homes, buildings, barns, bridges and other structures
- Phase I Archaeological Surveys
- Phase II Archaeological Surveys
- Close consultation with state agencies and NGOs
 - Preservation Virginia

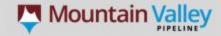




Geological Surveys

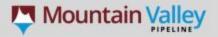
- Draper Aden currently conducting preliminary inventory of sinkholes, caves, karst and nearsurface rock deposits
- Once preliminary inventory is complete, Draper Aden may need to conduct more in-depth analysis of subsurface geology through geotechnical drills and other methods





How do surveys impact the route?

- What is the goal?
- Resource Reports
- NEPA Review & Environmental Impact Statement (EIS)
- State and federal agency consultation
- How to minimize impacts:
 - 1) Route modifications
 - 2) Design and construction specifications
 - 3) Mitigation



Landowner Questions & Concerns

- If landowners have questions or concerns regarding survey activity, we encourage them to contact us directly.
- We want to hear from landowners, and we want to answer their questions and resolve their concerns.
- How to contact us regarding survey activity?
 - Call or email Coates Field Services land agent
 - Coates Field Services mainline: 681-238-6128
 - Email: <u>mail@mountainvalleypipeline.info</u>